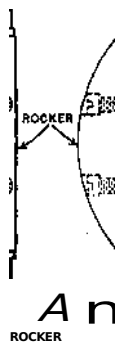
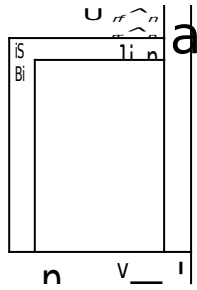


flat of the work, and then tapping it lightly, the jig is held securely in place. When drilling one of these half holes it is found that if an ordinary twist drill is used there is a tendency for it to "hog in," which is likely to result in breaking the tool. For this reason, it is desirable to use a straight-fluted or farmer's drill, although good results may also be obtained by grinding a twist drill in such a way that it has no rake or hook resulting from the spiral form of the flutes. A drill which is ground in this way presents a square or slightly obtuse cutting edge to the work, thus doing away with the trouble experienced from drills breaking when ground in the usual way.





Machinery

Fig. 10. Drill
Jig
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Rock-
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Facili-
tate
Re-
versing
its
Position

When drilling the hole, the work is set up on end on the drill press table and the drill is fed through the bushing in the usual way, the bushing holding the drill in position until it starts to cut. As the drill is fed down, there is a tendency to force it away from the work, but this tendency is resisted by the hardened stud *A* so that the half hole is drilled parallel with the axis of the work. This jig affords a convenient means of quickly accomplishing this work and having the two half holes match up accurately, so that no difficulty is experienced in assembling the work.

Jig having Rockers upon which it is turned over. — The box drill jig shown in Fig. 10 was used for drilling three holes in a certain

piece that was to be
produced in quantity. The
jig is